

E' removing the conductive material and the sacrificial layer using a chemical mechanical polishing process adapted to remove the conductive material and the sacrificial layer until the shield layer is reached, wherein the shield layer is more resistant to planarization by the chemical mechanical polishing process than the sacrificial layer, and wherein the shield layer inhibits thinning of the dielectric layer during the chemical mechanical polishing process, and wherein interposing the sacrificial layer between the conductive material and the shield layer reduces the amount of conductive material on the shield layer following the chemical mechanical polishing process; and

detecting when the chemical mechanical polishing process has removed the sacrificial layer.

Sub F' E' 56. (Amended) A method of forming a dielectric layer of a first thickness on a semiconductor wafer comprising:

forming the dielectric layer of the first thickness on the wafer;
positioning a shield layer on the dielectric layer;
positioning a sacrificial layer on the shield layer;
depositing conductive material on the sacrificial layer;
removing the conductive material and the sacrificial layer using a chemical mechanical polishing process adapted to remove the conductive material and the sacrificial layer until the shield layer is reached, wherein the shield layer is more resistant to planarization by the chemical mechanical polishing process than the sacrificial layer, and wherein the shield layer inhibits thinning of the dielectric layer during the chemical mechanical polishing process, and wherein interposing the sacrificial layer between the conductive material and the shield layer reduces the amount of conductive material on the shield layer following the chemical mechanical polishing process;

selecting an etchant for use with the chemical mechanical polishing process to facilitate removal of the sacrificial layer; and wherein the shield layer is selected to be resistant to the selected etchant; and